

Application No.: 10/578,638
Amendment Dated: **July 12, 2011**
Reply to Office Action of: June 1, 2011

MAT-8849US

Remarks/Arguments:

Claim 1-24 have been amended. No new matter is introduced herein. Claims 1-24 are pending.

Applicants appreciate the courtesy extended to their representatives by Examiner Williams and Supervisor Shiferaw during the telephone interview of June 29, 2011, and the subsequent telephone interview of June 30, 2011. During the interview of June 29, 2011, the Examiner explained his position for his reintroduction of the current § 103 rejection (which was previously withdrawn in the Office Action of December 3, 2010, after prosecution was reopened responsive to Applicants' Appeal Brief filed on August 12, 2010). Differences between Applicants' claim 1 and Tsuji et al. (US 2004/0056776, referred to herein as "Tsuji") were also discussed. During the interview, the Supervisor indicated possible amendments to overcome the prior art of record. Following the interview on June 29, 2011, the Examiner submitted proposed claims 1-4 to Applicants' representatives which he indicated would overcome the prior art of record. A subsequent telephone interview was conducted on June 30, 2011, responsive to the Examiner's proposed claim amendments. During this subsequent interview, the Examiner agreed that the amendments, as proposed by the Examiner, would overcome the prior art of record. Supervisor Shiferaw indicated that a further search would be required after a formal response was filed. Supervisor Shiferaw also indicated that if no further art were discovered, the application would be allowed.

Claims 1-4 have been amended, in accordance with the Examiner's proposed amendments of June 29, 2011. No new matter is introduced herein. Claims 5-24 have been amended to correspond with respective claims 1-4, as amended.

Claims 1-24 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsuji in view of Hisada et al. (U.S. 6,043,752, referred to herein as "Hisada"). It is respectfully submitted, however, that these claims are patentable over the cited art for the reasons set forth below.

Claim 1, as amended, includes features neither disclosed nor suggested by the cited art, namely:

... wherein the first data processor executes the first set of computer instructions and the second data processor executes the second set of computer instructions to perform the following functions comprising ...

... the first data processor and the second data processor **authenticate each other by an authentication** comprising: (1) the first data processor transmitting ... an encrypted data **based on the first data for mutual authentication** stored in the first storage and (2) the second data processor receiving the encrypted data ... decrypting the encrypted data and **comparing the decrypted data to the first data for mutual authentication** stored in the third storage ...

... the first data processor and the second data processor, **responsive to the authentication between the first data processor and the second data processor, interchange the second data for mutual authentication to set the portable unit for the immobilizer unit** in a way comprising: 1) the second data processor transmitting the second data for mutual authentication stored in the fourth storage ... 2) the first data processor further storing, into the second storage, the second data for mutual authentication ... and transmitting the second data for mutual authentication stored in the second storage ... and 3) the second data processor further storing, into the third storage, the second data for mutual authentication ... (Emphasis added)

Although not identical to claim 1, claims 2-4 include similar recitations.

Tsuji discloses, in Fig. 1, a remote control system including transmitter 1 and receiver 2. Transmitter 1 includes microprocessor 11 which enciphers a rolling code and uses the enciphered rolling code to produce a transmission code. (Paragraphs [0037-0041] and [0053]). Receiver 2 receives the transmission code from transmitter 1 and deciphers the enciphered rolling code [0042-0044].

Tsuji also discloses, in Fig. 10, an electronic key system including portable unit 30, vehicle transmitter 33 and wireless receiver 34. Portable unit 30 includes a transmitting/receiving circuit for receiving a challenge code signal (from transmitter 33) and transmitting an enciphered challenge code signal (to wireless receiver 34).

Portable unit 30 includes a RAM for storing an ID code of portable unit and an enciphering table (Fig. 11). (Paragraphs [0083-0085]).

As acknowledged by the Examiner during the telephone interview of June 30, 2011, Tsuji does not disclose or suggest that first and second data processors execute computer instructions to perform the functions comprising: 1) an authentication which includes passing and comparing data between an immobilizer unit and a portable unit based on first data for mutual authentication and 2) interchanging second data for mutual authentication between the first and second data processors to set the portable unit for the immobilizer unit, responsive to the authentication between the first and second data processors, as required by claim 1. Furthermore, as acknowledged by the Examiner on page 5 of the Office Action, Tsuji does not disclose that the data transmitted from the first processor is encrypted, as required by claim 1. Thus, Tsuji does not include all of the features of claim 1.

Hisada discloses, in Fig. 1, a vehicle security system including vehicle control unit 30 and remote-control unit 11. Vehicle control unit 30 produces a cryptographic code and remote-control unit 11 produces a cipher system code in response to the cryptographic code. (Col. 7, line 47 - Col. 8, line 5 and Col. 16, lines 48-55).

Hisada, however, does not disclose or suggest that first and second data processors execute computer instructions to perform the functions comprising: 1) an authentication which includes passing and comparing data between an immobilizer unit and a portable unit based on first data for mutual authentication and 2) interchanging second data for mutual authentication between the first and second data processors to set the portable unit for the immobilizer unit, responsive to the authentication between the first and second data processors, as required by claim 1. Thus, Hisada cannot provide the features of claim 1 which are missing from Tsuji. Accordingly, allowance of claim 1 is respectfully requested.

Although not identical to claim 1, claims 2-4 include features similar to claim 1 which are neither disclosed nor suggested by the cited art. Accordingly, allowance of claims 2-4 is respectfully requested for at least the same reasons as claim 1.

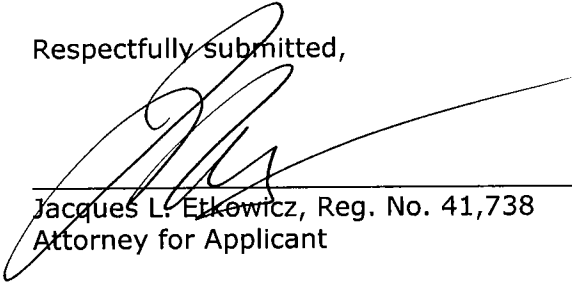
Application No.: 10/578,638
Amendment Dated: **July 12, 2011**
Reply to Office Action of: June 1, 2011

MAT-8849US

Claims 5-24 include all of the features of respective claims 1-4 from which they depend and are patentable over the cited art for at least the same reasons as respective claims 1-4.

In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance which action is respectfully requested.

Respectfully submitted,



Jacques L. Elkewicz, Reg. No. 41,738
Attorney for Applicant

DMG/fp/sh

Dated: July 12, 2011

P.O. Box 980
Valley Forge, PA 19482
(610) 407-0700

SH_1277338